### PATENT COOPERATION TREATY

## **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

A 1:	ile seferes es							
Applicant's or agent's file reference NT1518PCT		FOR FURTHER ACTION		See Form PCT/IPEA/416				
International application No.		International filing date (day/month/year)		Priority date (day/month/year)				
PCT/JP2004/002413		27.02.2004		11.08.2003				
International Patent Cl	assification (IPC) or nat	onal classification and IPC	l					
G09B29/00								
Applicant	, , , , , , , , , , , , , , , , , , , ,							
HITACHI, LTD.								
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.								
2. This REPOR	T consists of a total of	4	sheets, including	this cover sheet.				
<ol><li>This report i</li></ol>	s also accompanied by A	NNEXES, comprising:						
a. 🔲 (	sent to the applicant and	to the International Burea	u) a total of	sheets, as follows:				
	sheets of the descri	ption, claims and/or drawin	ngs which have been a	mended and are the basis for this report and/or				
	Instructions).	ectifications authorized by	this Authority (see Rul	e 70.16 and Section 607 of the Administrative				
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.								
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b <i>(</i>	seni io ine international	Bureau only) a total of (in	dicate type and number	r of electronic carrier(s))				
, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).								
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l '		ing to the following items:						
Box	No. I Basis of th	e report						
Box	No. II Priority							
Вох	No. III Non-establ	ishment of opinion with re	gard to novelty, inventi	ive step and industrial applicability				
Вох	Box No. IV Lack of unity of invention							
Box	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
Box	Box No. VI Certain documents cited							
Box	Box No. VII Certain defects in the international application							
Вох	Box No. VIII Certain observations on the international application							
			ate of completion of thi	is report				
Name and mailing address of the IPEA/JP			uthorized officer					
Facsimile No.			elephone No.					

Translation

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/002413

Box No	o. I Bas	sis of the report	1				
		ne language, this report is based on the internation	al application in the language in	which it was filed, unless otherwise			
ir	ndicated under t	his item.					
Σ	This report is based on translations from the original language into the following which is the language of a translation furnished for the purposes of:						
		national search (Rule 12.3 and 23.1(b))					
		ication of the international application (Rule 12.4)					
	inter	national preliminary examination (Rule 55.2 and/o	or 55.3)				
re	2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):						
Ļ		tional application as originally filed/furnished					
L	the descrip	otion:					
	pages _			as originally filed/furnished			
	pages* _						
_	pages* _		received by this Authority on				
	the claims:	:					
	nos.		· · · · · · · · · · · · · · · · · · ·	as originally filed/furnished			
	nos.*		as amended (togeth	ner with any statement) under Article 19			
	nos.*		received by this Authority on				
	nos.*		received by this Authority on				
	the drawin	ngs:					
	sheets			as originally filed/furnished			
	sheets*		received by this Authority on				
	sheets*		received by this Authority on				
	a sequence	e listing and/or any related table(s) – see Suppleme	ental Box Relating to Sequence	Listing.			
3.		dments have resulted in the cancellation of:					
_		description, pages					
		claims, nos.					
		- A					
4. F	This repor	rt has been established as if (some of) the amend	ments annexed to this report ar	nd listed below had not been made, since			
	they have	been considered to go beyond the disclosure as file	ed, as indicated in the Supplem	ental Box (Rule 70.2(c)).			
		description, pages					
		claims, nos.					
		drawings, sheets/figs					
	the s	sequence listing (specify):					
	any	table(s) related to sequence listing (specify):					
	* If item 4 applies, some or all of those sheets may be marked "superseded."						

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/002413

Box No. V Reasoned statement under Article citations and explanations support			ticle 35(2) with regard to novelty, inventive step or industrial applicability; porting such statement		
l.	Statement				
	Novelty (N)	Claims	1-10	YES	
		Claims		NO	
	Inventive step (IS)	Claims		YES	
		Claims	1-10	NO	
	Industrial applicability (L	A) Claims	1-10	YES	
		Claims		NO	

#### 2. Citations and explanations (Rule 70.7)

- Document 1: Hideki Enomoto "Hisesshoku IC Card to GIS wo
  Mochiita Kuukan Jouhou System", Dai 23 Kai
  Proceedings of the Symposium on Engineering
  Information Processing System, 27 October
  1998
- Document 2: Tatsunori Sada, "Kensetsu Bunya ni okeru Kuukan Jouhou Riyou no Torikumi", JACIC Joho, Vol. 14, No. 2, 30 July 1999
- Document 3: JP 2000-039342 A (Yasumasa Itagura), 8

  February 2000, paragraphs [0018] to [0053];

  fig. 1 to 3 (Family: none)

#### Claims 1 to 3 and 10

Document 1 sets forth an information pile space information system having a pile-shaped container which can be inserted into the ground, having a non-contact IC card with an ID which can be transmitted by mobile phone, a GIS database which stores information of the IC card, an antenna, a mobile computer and an information management center, and document 3 newly cited in the international preliminary examination report sets forth a measurement probe housing a sensor that can transmit measurement values by wireless communications, which can

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

be installed merely by inserting into the ground, and it would be easy for a person skilled in the art to combine the feature of the invention set forth in document 3 with the feature of the invention set forth in document 1.

#### Claims 4 to 9

In addition to the disclosures set forth in document 3, document 2 indicates that "it is possible to locally detect the non-contact IC pile, and refer to the basic information of that pile" (page 59, left column, lines 14 to 16), "the GIS database is searched and displayed" (page 59, left column, lines 20 to 22), "using the ID contained in a non-contact IC pile as a key, the database of the GIS center is searched and referred to by mobile communications" (page 59, left column, line 23 to middle column, line 1), "there is two-way data exchange, such as writing position information measured using RTK-GPS to a non-contact IC pile, or converting the absolute coordinates of RTK-GPS to local coordinates based on coordinates read off from a non-contact IC pile" (page 59, middle column, lines 20 to 25), and "a system which connects a reading sensor for the non-contact IC pile to the total station, and directly imports pile information to the total station" (page 59, lines 10 to 14). Document 2 also sets forth a feature wherein icons, buttons and windows are displayed on a display unit (page 58, fig. 2 and photograph 2), and it would be easy for a person skilled in the art to combine the features set forth in document 2 with the features of the invention set forth n document 3.